

## BEST AVAILABLE COPY

Appln. No. 10/056,803  
Response dated June 2, 2004  
Response to Final Office Action dated March 9, 2004

## REMARKS

Claims 1-13 and 15 to 20 are pending in the application.

*Claim Rejections*

Claims 1-3 have been provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-11 of copending Application No: 10/150,500. Applicants respectfully request that this rejection be held in abeyance until such time as allowable subject matter is indicated. Applicants will then file the terminal disclaimer.

*Rejection of claims under 35 U.S.C. 102(b)*

Claims 1-7, 16-17 and 19-20 have been rejected under 35 U.S.C. 102(b) as being anticipated by McArdle et al.

The Applicants submit that McArdle et al. relates to the use of a protein polysaccharide complex as a delivery composition for plant protection agents (column 1, lines 19-21). McArdle et al. teach the use of protein polysaccharide composition for the slow or controlled release of active agents (column 4, lines 1-3). For example, the compositions taught in McArdle et al. comprise between about 90% to 99.5% by weight of a water soluble polysaccharide impregnated with between about 10% to 0.5% by weight of a substantially water insoluble protein, and at least one formulation containing a herbicidal or herbicidal/pesticidal agent (Column 22, claim 22). This is in contrast to the present invention that teaches a methods for of increasing the yield of a crop, accelerating the emergence of a crop, and accelerating the maturity of a crop using a peptide and polysaccharide complex in the absence of a herbicidal or herbicidal/pesticidal agent. See for example, pages 10-13, Examples 1-3 of the specification which teach that a peptide-polysaccharide complex affects crop yield when applied to seed or soil in the absence of a plant protecting agent, e.g. an herbicidal or herbicidal/pesticidal agent. McArdle et al. does not teach,

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nor does it suggest, the use a peptide-polysaccharide complex in the absence of additional plant protecting agents. Rather it teaches the use of peptide-polysaccharide complex as a delivery system for other agents. As such, McArdle et al. does not anticipate the invention. Accordingly, the Applicants respectfully request that the rejection of claims 1-7, 16-17 and 19-20 under 35 U.S.C. 102 (b) be withdrawn.

*Rejection of claims under 35 U.S.C. 103(a)*

Claims 8-13, 15 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over McArdle et al. in view of Redenbaugh et al. The Applicants submit that it would not *be prima facie* obvious to one skilled in the art at the time the invention was made to combine the teachings of McArdle et al. with Redenbaugh et al. for the reasons stated below.

First, McArdle et al. does not teach or suggest a crop seed or crop seed coating. Second, there is no motivation to combine the teachings of Redenbaugh et al. with McArdle et al. Redenbaugh et al. teaches a seed coating of a water saturated hydrogel together with at least one adjuvant capable of affecting the seeds (Column 3, lines 31-34), wherein the seeds may be from a variety of sources and species (column 9, lines 25-30). The Examiner contends that, given the advantages of coating seeds as taught by Redenbaugh et al., one of ordinary skill in the art would be motivated to modify the peptide-polysaccharide complex as taught by McArdle and use it as a crop seed coating. The Applicant's respectfully disagree and submit that Redenbaugh et al. teach perfectly good crop seed coatings that improve germination. Given the functional seed coatings taught in Redenbaugh, there is no reason why one skilled in the art would be motivated to combine the teachings.

In addition, the crop seed coating that is exemplified in Redenbaugh et al. is a coating that holds moisture (a water saturated hydrogel), *See* column 3 lines 64-68 and column 17, claim 1, lines 38-39). Redenbaugh et al. teach a water saturated hydrogel that contains free water, which may be used by the seed to initiate the process of germination at the time of delivery (Column 4, lines 54-56). This is in contrast to the crop seed coating of the present invention that

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is dry and keeps out moisture. Thus, Redenbaugh et al. teaches away from the present invention, further rendering no motivation to combine.

Furthermore, as indicated and described earlier, McArdle et al. does not anticipate the present invention. Thus, even if one were to combine the references of McCardle et al. and Redenbaugh et al., one would not arrive at the present invention.

Accordingly, the Applicants respectfully request that the rejection of claims 8-13, 15 and 18 under 35 U.S.C. 103(a) be withdrawn.

In view of the foregoing, applicant respectfully submits that all claims are in condition for allowance. Early and favorable action is requested.

***Conditional Petition for Extension of Time and Fee Authorization***

This conditional petition is being filed along with the accompanying Amendment and provides for the possibility that Applicants have inadvertently overlooked the need for a fee for extension of time.

If any extension of time for the accompanying response is required, Applicants request that this be considered a petition therefore.

The Examiner is authorized to charge any fee deficiencies or credit any overpayments associated with this submission to the Nixon Peabody LLP Deposit Account No. 50-0850.

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Respectfully submitted,



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